

THE CLAIMS:

1. (Previously Presented) A method for multicasting changes made in a directory server which contains information within a directory and makes a change to the information in the directory in accordance with a directory change operation, comprising the steps of:

establishing plural multicast groups, each multicast group corresponding to a respective change category for a type of change made to the directory in the directory server; and

submitting change information for multicasting responsive to a change being made to the directory in the directory server, the change information being submitted to each member which belongs to a selected one of the plural multicast groups corresponding to the change category of the type of change made to the directory in the directory server.

2. (Previously Presented) A method according to Claim 1, wherein the change information is submitted to the multicast group utilizing a connectionless protocol.

3. (Previously Presented) A method according to Claim 1, wherein each of the plurality of change categories correspond to an add, delete, modify or search change.

4. (Original) A method according to Claim 1, wherein changes made in the directory server are performed utilizing a Lightweight Directory Server Protocol.

5. (Original) A method according to Claim 1, wherein change information is submitted for multicast by a plug-in that extends capabilities of the directory server.

6. (Original) A method according to Claim 5, wherein the plug-in generates information packets based on changes made in the directory server, and submits the information packets to the multicast groups.

7. (Previously Presented) A method according to Claim 1, wherein a client registers with at least one of the plural multicast groups in order to obtain the change information corresponding to each multicast group for which the client has registered.

8. (Original) A method according to Claim 7, wherein the client registers with multicast groups established for a plurality of directory servers.

9. (Previously Presented) A method for obtaining directory server change information from a directory server which contains information within a directory and which makes a change to the information in the directory in accordance with a directory change operation, comprising the steps of:

registering as a member of at least one of a plurality of multicast groups, each of the plurality of multicast groups corresponding to a respective change category for a type of change made to the directory in the directory server; and

receiving from the directory server, change information submitted to each member which belongs to the multicast group corresponding to the change category of the type of change made to the directory in the directory server.

10. (Original) A method according to Claim 9, wherein the member registers with multicast groups established for a plurality of directory servers.

11. (Original) A method according to Claim 9, wherein the member registers with at least one multicast group corresponding to add, delete, modify or search change categories.

12. (Previously Presented) An apparatus for multicasting changes made in a directory server which contains information within a directory and which makes a change to the information in the directory in accordance with a directory change operation, wherein plural multicast groups are established such that each multicast group corresponds to a respective change category for a type of change made to the directory in the directory server, comprising:

a processor for executing executable process steps; and

a memory medium storing executable process steps, wherein the executable process steps comprise (a) generating change information responsive to a change being made to the directory in the directory server, wherein the change information corresponds to the type of change made to the directory, and (b) submitting the change information to

each member which belongs to a selected one of the plural multicast groups corresponding to the change category of the type of change made to the directory in the directory server.

13. to 18. (Canceled)

19. (Previously Presented) Computer-executable process steps for multicasting changes made in a directory server which contains information in a directory and which makes a change to the information in the directory in accordance with a directory change operation, wherein plural multicast groups are established such that each group corresponds to a respective change category for a type of change made to [[a]] the directory in the directory server, the computer-executable process steps comprising:

generating change information responsive to a change being made to the directory in the directory server, wherein the change information corresponds to the type of change made to the directory; and

submitting the change information to each member which belongs to a selected one of the plural multicast groups corresponding to the change category of the type of change made to the directory in the directory server.

20. (Previously Presented) Computer-executable process steps according to Claim 19, wherein the change information is submitted to the multicast group utilizing a connectionless protocol.

21. (Previously Presented) Computer-executable process steps according to Claim 19, wherein each of the plurality of change categories correspond to add, delete, modify or search.

22. (Original) Computer-executable process steps according to Claim 19, wherein changes made in the directory server are performed utilizing a Lightweight Directory Server Protocol.

23. (Original) Computer-executable process steps according to Claim 19, wherein the process steps comprise a plug-in for extending capabilities of the directory server.

24. (Previously Presented) Computer-executable process steps according to Claim 19, wherein a client registers with at least one of the plural multicast groups in order to obtain the change information corresponding to each multicast group for which the client has registered.

25. (Original) Computer-executable process steps according to Claim 24, wherein the client registers with multicast groups established for a plurality of directory servers.

26. to 28. (Canceled)

29. (Previously Presented) Computer executable process steps for obtaining directory server change information from a directory server which contains information in a directory and which makes a change to the information in the directory in accordance with a directory change operation, comprising:

registering as a member of at least one of a plurality of multicast groups, wherein each of the plurality of multicast groups corresponds to a respective change category for a type of change made to the directory in the directory server; and

receiving, from the directory server, change information submitted to each member which belongs to the multicast group corresponding to the change category of the type of change made to the directory in the directory server.

30. (Original) Computer executable process steps according to Claim 29, wherein the member registers with multicast groups established for a plurality of directory servers.

31. (Original) Computer executable process steps according to Claim 28, wherein the member registers with at least one multicast group corresponding to add, delete, modify or search change categories.

32. (Previously Presented) A method for providing notification of changes made in a directory server which contains information in a directory and which makes a change to the information in the directory in accordance with a directory change operation, comprising the steps of:

establishing plural groups each corresponding to a respective change category for a type of change made to the directory in the directory server; and

in response to a change being made to the directory in the directory server, sending change information to each member which belongs to a selected one of the plural groups that corresponds to the change category of the type of change made to the directory in the directory server.

33. (Previously Presented) A method according to Claim 32, wherein the plurality of change categories correspond to different directory change operations.

34. (Previously Presented) Computer-executable process steps for providing notification of changes made in a directory server which contains information in a directory and which makes a change to the information in the directory in accordance with a directory change operation, the process steps comprising the steps of:

establishing plural groups each corresponding to a respective change category for a type of change made to the directory in the directory server; and

in response to a change being made to the directory in the directory server, sending change information to each member which belongs to a selected one of the plural groups that corresponds to the change category of the type of change made to the directory in the directory server.

35. (Previously Presented) Computer-executable process steps according to Claim 34, wherein the plurality of change categories correspond to different directory operations.